627.41 (73)
RIVERS AND FLOODS

By H. C. FRANKENFIELD, Meteorologist

An inspection of the table at the end of this report will show that there were no floods of consequence during the month of February. There were moderate floods in some of the South Atlantic and East Gulf rivers, and in the majority of the tributary streams of the Ohio River. There were also unimportant rises in the Illinois River, the Yazoo River of Mississippi, and the Sulphur and lower Trinity Rivers of Texas. All of these floods were properly forecast, and the resulting losses were insignificant. In North and South Carolina property valued at \$27,000 was saved through the warnings.

In the Arkansas River from Cimarron to Wichita, Kans., ice jams from February 5 to 13, inclusive, were productive of local floods. The ice conditions were said to have been the most severe in the history of the State of Kansas so far as is known, and extended for about 300 miles. Warnings were issued beginning with February 6, and thereafter when necessary until the ice had passed out. These warnings were the means of saving a large quantity of property and the reported losses were only \$15,050. A number of letters was received from interested parties highly commending the warnings issued from the Wichita office of the Weather Bureau.

| River and station | Flood stage | Above flood stages—dates | | Crest | |
|--|----------------|-----------------------------|------------|-------------------------|----------------------|
| | | From- | то- | Stage | Date |
| ATLANTIC DEAINAGE Neuse: | Feet | | | Feet | |
| Smithfield, N. C | 14 | 21 | 23 | 16.1 | 21-22 |
| Cape Fear: Elizabethtown, N. C | 22 | 21 29 | 24 (¹) | 27. 2 | 23 |
| Pesdee: Mars Bluff, S. C | 17 | 23 | 25 | 17. 5 | 24 |
| Santee: Rimini, S. C | 12 | (*) | 5 | | |
| Ferguson, S. C | | (²) 24 | (1) (1) | 13. 2 | 25 |
| Broad: Blairs, S. C | 15 | 28 | 29 | 16. 2 | 28 |
| Saluda: Chappels, S. C | 14 | 28 | (1) | 14, 8 | 28 |
| Broad: Carlton, Ga | 11 | 27 | . 27 | 11.0 | 27 |
| Ocmulgee: Abbeville, Ga | 11 | 1 | 2 | 11.9 | 1 |
| EAST GULF DRAINAGE | | | | | ł |
| Tombigbee: Lock No. 4, Demopolis, Ala Black Warrior: | 39 | 27 | (1) | | |
| Lock No. 10, Tuscaloosa, Ala | 46 | . 28 | (1) | 51.0 | 28 |
| Chickasawhay: Enterprise, Miss West Pearl: | 21 | 28 | (1) | | |
| Pearl River, La | . 13 | (2) | 9 | | |
| mississippi drainage | ļ | | | ł |] |
| Monongahela: Lock No. 15, Hoult, W. Va | 22 | 20 | 21 | 26.4 | 20 |
| Lock No. 10, Morgantown, W. Va Lock No. 7, Martin, Pa | 25 30 | 20 20 | 20 21 | 26. 1 30. 8 | 20 |
| LOCK NO. 4. PR | 1 31 | | 21 | 32.8 | 21 |
| Little Kanawba: Glenville, W. Va. Creston, W. Va. | 23 20 | 20 20 | 20 21 | 26. 2 21. 8 | 20 20 |
| Hocking: Athens, Ohio | 1 | 21 | 21 | 17. 1 | 21 |
| Green: Lock No. 4, Woodbury, Ky | | 22 | 23 | 33.9 | 23 |
| Wabash: La Fayette, Ind Terra Haute, Ind | 16 | | 1 9 | 1 22. 0 17. 2 | 3, 6 |
| Vincennes, Ind | 14 | | 13 12 | 15. 3 17. 8 | 10, 12 |
| White, West Fork: Edwardsport, Ind | . 14 | 5 | 9 | 16.0 | 7 |
| Illinois: Peru, Ill | i | | 19 | 16.4 | 9 |
| Henry, III | . 7 | | (1) | 9.6 | 12 |
| Peoria, Ill Havana, Ill Beardstown, Ill | 16 | 14 | 17 | 16. 4 14. 0 14. 3 | 12-13 14-17 17 |

| Hiver and station | Flood stage | Above flood stages—dates | | Crest | |
|----------------------------|----------------|-----------------------------|----------|----------------|----------|
| | | From- | То— | Stage | Date |
| Arkansas: Dodge City, Kans | Feet 5 | 7 | 8 | Feet 6. 3 | 7 |
| Yazoo: Yazoo City, Miss | 25 | (4) | 11 | 26. 0 | 4-5 |
| Swan Lake, Miss | 25 | (3) | 6 | | |
| Finley, Tex | 24 | (2) | 1 | | |
| North Platte, Nebr | 5 | (1) | (¹) | | |
| Sabine: Logansport, La | 25 | 29 | (1) | | |
| Trinity: Liberty, Tex | 25 | 28 | (1) | | |
| Gonzales, TexVictoria, Tex | 22 16 | 20 21 | 20 23 | 22, 5 19, 2 | 20 22 |

¹Continued at end of month. ²Ice gorge. ¹Continued from last month. ⁴Unknown; measurement impracticable prior to 12th.

MEAN LAKE LEVELS DURING FEBRUARY, 1924

By UNITED STATES LAKE SURVEY
[Detroit, Mich., March 4, 1924]

The following data are reported in the "Notice to Mariners" of the above date:

| Data | Lakes ¹ | | | | | |
|---|----------------------------|-------------------------|----------------------------|----------------------------|--|--|
| | Superior | Michigan and Huron | Erie | Ontario | | |
| Mean level during February, 1924: Above mean sea level at New York Above or below— | Feet 601. 33 | Feet 578, 71 | Feet 571. 27 | Feet 244. 85 | | |
| Mean stage of January, 1924 Mean stage of February, 1923 Average stage for February last 10 | -0.23 -0.28 | +0. 13 -0. 13 | -0. 02 +0. 44 | +0.08 +0.38 | | |
| years Highest recorded February stage Lowest recorded February stage | -0. 57 -1. 15 +0. 57 | -1.17 -4.01 -0.13 | -0. 22 -2. 48 +0. 64 | -0. 44 -2. 82 +1. 02 | | |
| Average relation of the February level to: January level March level | | (1) -0.1 | -0. 2 -0. 2 | (1) -0, 2 | | |

Lake St. Clair's level: In February, 1924, 573.16 feet. 2 Practically no difference.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, FEBRUARY, 1924

By J. B. KINCER, Meteorologist

The first and middle parts of February were generally favorable for farm work in the Southern States, and the preparation of soil for spring planting made fairly good progress, although there was little plowing done in Oklahoma, and there was considerable delay in Arkansas and Tennessee by wet or frozen soil. It was too cool, however, for best growth of truck crops during much of the time in the Southeastern States, and there was considerable frost injury well toward the southern portion of the Florida Peninsula. In the west Gulf section temperatures were more favorable for truck and fairly good progress was reported. The latter part of the month was generally cold, cloudy, wet, and unfavorable for farm work throughout t e South, although conditions were fairly favorable in parts of Florida. Planting was delayed and there was some damage by frost, while germination of truck crops was slow. At the close of the month, however, planting of early potatoes had been about completed in the commercial districts of South Carolina, and some progress had been made in the preparation of tobacco seed beds in Virginia.

The weather was rather unfavorable for wheat in the Ohio Valley area, where there was much complaint of damage by alternate freezing and thawing, especially in Kentucky and the southern portions of Indiana and Illinois. At the close of the month wheat was greening